WATER UTILITIES
ARLINGTON
THE AMERICAN DREAM CITY

2016

ARLINGTON WATER UTILITIES

Water Quality Report

Your water, our responsibility

Arlington Water Utilities takes pride in meeting or exceeding all federal and state guidelines. The water sent to Arlington residents, businesses and visitors is treated at the state-of-the-art Pierce-Burch and the John F. Kubala Water Treatment Plants.

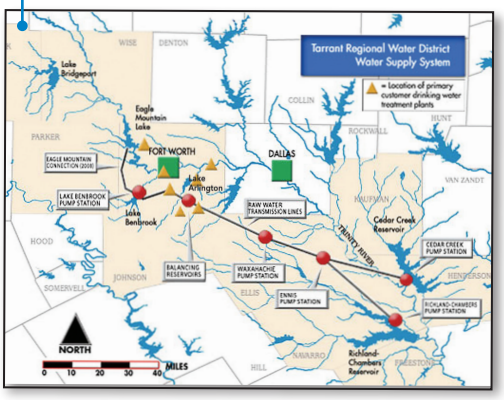
Ozone is used as the primary disinfectant. Aluminum sulfate and a cationic polymer are added to help dirt and other particles clump together and settle out during treatment. The water is then filtered through granular activated carbon beds to remove smaller particles and substances that are dissolved in the water. The water is treated with chloramine (chlorine and ammonia) as it enters the pipe system. Chloramine is a disinfectant that keeps the water safe on its way to your faucet.

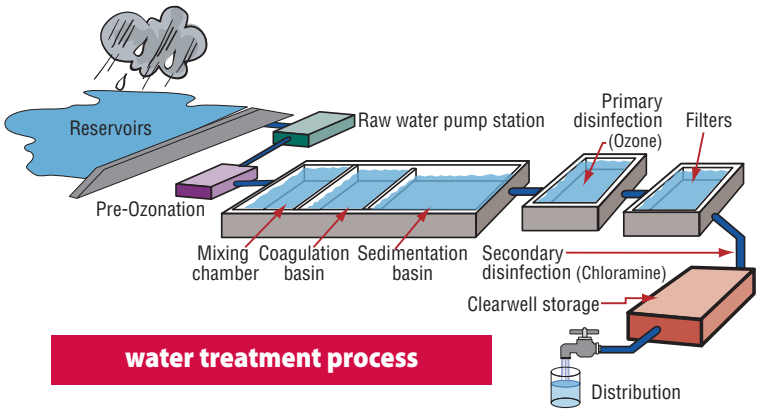
In 2015, the Arlington City Council approved an 18-month, $14 million equipment upgrade at the treatment plants. Replacing aged ozone generators and installing advanced control systems will make the plants more efficient and less costly to run.

Arlington Water Utilities tests drinking water at over 120 taps all over the city each month. In 2016, the laboratory collected about 5,000 samples and performed about 22,350 tests monitoring 144 analytes. This report contains data collected from Jan. 1, 2016 through Dec. 31, 2016, unless another time frame is noted.

Where does Arlington drinking water come from?

Arlington gets its water for treatment from the Tarrant Regional Water District. The water comes from four reservoirs - Cedar Creek, Richland-Chambers, Lake Arlington and Lake Benbrook.





water treatment process

Health information for Special Populations

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly or immuno-compromised persons such as those undergoing chemotherapy for cancer; those who have undergone organ transplants; those who are undergoing treatment with steroids and people with HIV/AIDS or other immune system disorders can be particularly at risk from infections. You should seek advice about drinking water from your health care provider. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline (800-426-4791).

Este informe incluye información importante sobre su agua potable, si necesita ayuda para entender esta información por favor llame al 817-575-8984.

Ban bao cao nay bao gom nhung thong tin can biet ve nuoc uong. Moi chi tiet va thac mac xin lien lac 817-575-8984.

Table A. Regulated Substances.

These substances are regulated or are required to be monitored and were detected in Arlington tap water in 2016. None of the detected substances exceeded the regulated limits.

Substance	Units	Avg.	Min.	Max.	MCL	MCLG	Possible Source
Atrazine	ppb	0.10	ND	0.19	3	3	Runoff from herbicide used on row crops
Barium	ppm	0.158	0.032	0.267	2	2	Naturally present
Antimony	ppb	0.27	ND	0.27	6	6	Discharge from petroleum sources
Arsenic	ppb	0.7	ND	0.7	10	10	Naturally present & runoff from herbicides
Chromium	ppb	1	ND	1	100	100	Naturally present & industrial sources
Cyanide	ppb	8	ND	8	200	200	Discharge from metal/plastic/fertilizer factories
Bromate[3]	ppb	<5	<5	<5	10	10	Byproduct of drinking water disinfection
Chloramines[2]	ppm	3.5	3.4	3.6	MRDL=4	MRDLG=4	Water additive used to control microbes
Fluoride	ppm	0.57	0.47	0.8	4	4	Water additive promoting strong teeth
Nitrate as Nitrogen	ppm	0.765	0.21	1.940	10	10	Runoff from fertilizers
Nitrite as Nitrogen	ppm	0.055	ND	0.393	1	1	Runoff from fertilizers
Radioactive (2015)							
Radium 228	pCi/L	<1.0	<1.0	<1.0	5	NA	Decay of natural and man-made deposits
Beta/Photon Emitters	pCi/L	<4.0	<4.0	<4.0	50	NA	Decay of natural and man-made deposits
Gross Alpha Particle Activity	pCi/L	<2.0	<2.0	<2.0	15	NA	Decay of natural and man-made deposits
Simazine	ppb	0.09	ND	0.09	4	4	Runoff from herbicide used on row crops
Total Coliform[4,7]	%	NA	ND	1.00%	5%	NA	Naturally present in the environment
Total Organic Carbon (TOC)							Naturally present in the environment
PB Plant (raw)	ppm	5.5	4.7	6.4			(PB = Pierce-Burch Plant)
PB Plant (drinking)	ppm	2.9	2.6	3.3			
PB Removal ratio[5]	remov. ratio	1.3	1.1	1.6			
JK Plant (raw)	ppm	5.2	4.2	6.3			(JK = John F. Kubala Plant)
JK Plant (drinking)	ppm	2.5	1.9	2.9			
JK Removal ratio[5]	remov. ratio	1.5	1.1	1.7			
Total Trihalomethanes[2]	ppb	12.6	12.3	13.2	80	NA	By-product of drinking water chlorination
Haloacetic Acids (HAA5)[2]	ppb	7.7	6.7	9.2	60	NA	By-product of drinking water chlorination
Turbidity							
Highest single measurement % of samples < 0.3 NTU	NTU %	0.08 99.9%	0.03 99.9%	0.34 100%	TT = 1.0 TT = 95%	0 NA	Soil runoff

Substance	Units	Action Level	No. Sites > Action Level	90th %-tile	Range	Possible Source
Copper (2015)[1]	ppb	AL = 15	1	1.44	ND-46.8	Corrosion of household plumbing systems
Lead (2015)[1]	ppm	AL = 1.3	0	0.166	ND-0.49	Corrosion of household plumbing systems

[1]Instead of MCLs for lead and copper, EPA requires that 90 percent of water samples obtained from customers' taps contain less than the Action Level for each metal. Sampling is required every 3 years.

[2]Compliance is based on a calculated annual average of all samples at routine sites.

[3]Compliance is based on a calculated running annual average of the quarterly averages.

[4]Coliform bacteria are used as indicators of microbial contamination of drinking water because they are easily detected and found in the digestive tract of warm blooded animals. While not themselves disease producers, they are often found in association with other microbes that are capable of causing disease. Coliform bacteria are more hardy than many disease-causing organisms. Therefore their absence from water is a good indication that the water is bacteriologically safe for human consumption.

[5]Removal ratio is the percent of TOC removed by the treatment process divided by the percent of TOC required by TCEQ to be removed. Based on running annual average of ratios.

[6]Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms, including bacteria, viruses and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

[7]In 2016, Tarrant Regional Water District analyzed all raw water sources for cryptosporidium and giardia each month. One of the samples, taken during 2016 contained 0.09 oocysts of cryptosporidium and two samples contained 0.17 and 0.09 organisms per liter for giardia. Cryptosporidium is a pathogen which may be found in water contaminated by feces. Although filtration removes cryptosporidium and giardia, it cannot guarantee 100% removal.

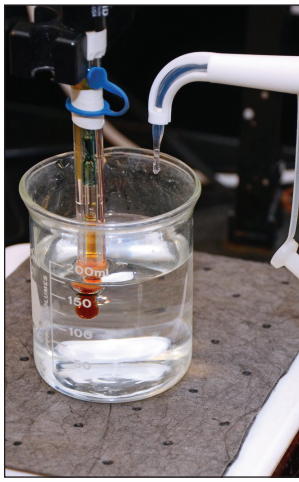


Table Definitions

Action Level (AL) The concentrati
which, if exceeded, triggers treat
requirements which a water syst

< (xxx) less than the amount liste

≥ (xxx) equal to or greater than t

Maximum Contaminant Level Goa
a contaminant in drinking water
no known or expected risk to he
margin of safety.

Maximum Contaminant Level (MC
a contaminant that is allowed in
are set as close to the MCLGs as
available treatment technology.

Maximum Residual Disinfectant L
level of a drinking water disinfec
is no known or expected risk to h
reflect the benefits of the use of
microbial contamination.

Maximum Residual Disinfectant L
level of a disinfectant allowed in
is convincing evidence that addi
necessary for control of microbia

NA Not applicable

ND (Not Detected) No level of the
detected.

NE Not established

NTU (Nephelometric Turbidity Uni
measuring turbidity, a measure c
water.

pCi/L (picocuries per Liter) A meas
the water.

ppb (parts per billion, ug/L) A uni
roughly equal to 1 drop in 100,0

ppm (parts per million, mg/L) A u
roughly equal to 1 drop in 100 g

TT (Treatment Technique) A requi
to reduce the level of a contamin

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ment or other
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l (MCLG) The level of
below which there is
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L) The highest level of
drinking water. MCLs
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evel Goal (MRDLG) The
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disinfectants to control

evel (MRDL) The highest
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Table B. Unregulated Substances.

These substances are not currently regulated by EPA . The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

Substance	Units	Avg.	Min.	Max.	MCL	MCLG	Possible Source
Chloroform	ppb	4.3	3.6	5	Not Regulated	NE	By-product of drinking water disinfection; not regulated individually; included in Total Trihalomethanes.
Bromodichloromethane	ppb	3.9	3.8	4.2	Not Regulated	NE	
Chlorodibromomethane	ppb	3.6	3.3	4.2	Not Regulated	60	
Bromoform	ppb	0.7	0.4	1.3	Not Regulated	NE	
Dichloroacetic Acid	ppb	5.62	4.9	6.82	Not Regulated	NE	By-product of drinking water disinfection; not regulated individually; included in Haloacetic Acids.
Bromoacetic Acid	ppb	0.03	0	0.09	Not Regulated	NE	
Dibromoacetic Acid	ppb	0.72	0.4	1.04	Not Regulated	NE	
Chloroacetic Acid	ppb	0.61	0.14	1.34	Not Regulated	NE	
Trichloroacetic Acid	ppb	0.64	0.32	0.78	Not Regulated	300	

Other Substances of Interest

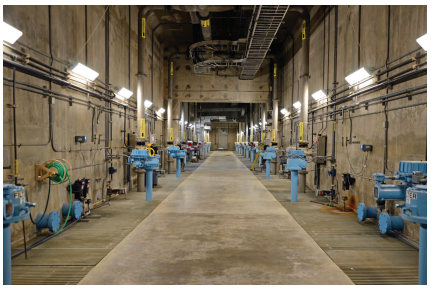
Substance	Units	Avg	Min	Max
Total:				
Alkalinity	ppm	90.9	38	119
Hardness	ppm	98.5	44	136
Hardness	grains/gal.	5.8	2.6	7.9
Calcium	ppm	30	14	46
Sodium	ppm	22.5	15.2	27.9
Magnesium	ppm	3.8	2.4	5.2
Chloride	ppm	16	6	21
pH	units	8.2	7.7	8.6

The Environmental Protection Agency (EPA) Safe Drinking Water Hotline

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some constituents. The presence of these constituents does not necessarily indicate that water poses a health risk. In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain substances in water provided by public water systems.

More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline at 800-426-4791 or visiting the EPA website at www.epa.gov/safewater.

Of the 18,963,640,404 gallons of water treated by the City of Arlington in 2016, an estimated 1,711,641,201 gallons of water (9%) was lost due to a variety of reasons such as main line breaks, leaks, unauthorized consumption, etc.



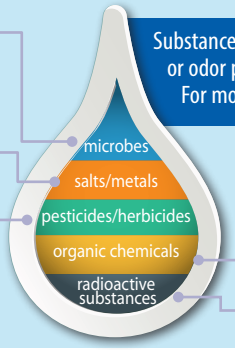
Substances Expected to be in Drinking Water

The City of Arlington and the State of Texas both analyze your drinking water. Any regulated substances that were detected during the last year are shown in Table A. As shown in the table, all are well below the established maximum contaminant levels. All water dissolves substances from the ground as it flows over and through it. Substances that may be present in raw water include such things as:

Microbes such as viruses and bacteria that come from septic systems, agricultural livestock operations and wildlife

Salts and metals that can be naturally occurring or the result of urban storm water runoff, industrial or domestic wastewater discharges or farming

Pesticides and herbicides that may come from a variety of sources such as agriculture, urban storm water runoff or residential uses



Substances may be found in drinking water that may cause taste, color, or odor problems but are not necessarily causes for health concerns. For more information, call Laboratory Services at 817-575-8984.

Organic chemical substances that include synthetic and volatile organic chemicals that are by-products of industrial processes and can also come from gas stations and urban storm water runoff

Radioactive substances that are naturally occurring

For more information:

Water Quality:.....817-575-8984

Laboratory Services water sample requests, water quality questions or water quality problems. If you have questions concerning this brochure, ask for the laboratory.

Customer Care:.....817-275-5931

Open new or transfer account, billing inquiries, water conservation, water and sewer rates.

Emergency Water, and Sewer Services (24 hours):.....817-459-5900

Service interruptions, water leaks, sewer problems

Tarrant Regional Water District (TRWD): 817-335-2491

Texas Commission on Environmental Quality (TCEQ): 512-239-1000

To participate in decisions concerning water:

Attend the Arlington City Council meetings, held on the 2nd and 4th Tuesday nights each month at 6:30 p.m. in City Hall, 101 West Abram Street.

Meeting schedule is posted online at www.arlingtontx.gov/citycouncil/meeting-schedule/
To view City Council Agenda or to watch a City Council meeting webcast, please visit www.arlingtontx.gov/citycouncil/agendas/

Visit our website at:

www.ArlingtonTX.gov/water/CCR

Arlington Water Utilities Lab Staff

What is geosmin and why is it in my water? Geosmin is a compound found in algae that live in lakes, such as Lake Arlington, which provides water for the Pierce-Burch Treatment Plant. When algae die, often during changes in temperature, geosmin is released into water. It is not harmful to humans, but unfortunately, it can cause an unpleasant taste and odor, even at very low levels. Most people will begin to notice geosmin at about 15 parts per trillion. (A part per trillion is equivalent to a drop of water dissolved in 20 Olympic-size swimming pools.) Most years, Arlington Water is able to avoid any geosmin issues by operating only the John F. Kubala Treatment Plant, which gets water from East Texas reservoirs, during winter months.

What is AMI and what does it mean for my water bill? As part of its ongoing meter replacement program, Arlington Water Utilities is installing Advanced Metering Infrastructure throughout the city. The 10-year project started in late 2013. AMI meters measure the water traveling to a home or business in the same way as traditional meters. However, the AMI system can generate more in-depth data for customers and increase department efficiency because readings are transmitted remotely. By ordinance, all meters must meet the accuracy test guidelines of the American Water Works Association. As they age, small meters used for home service may become less accurate. New meters typically measure usage more accurately and this may result in a higher billed consumption.

Should I be worried about lead in my drinking water? If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Arlington does not have any lead service lines (pipes carrying water to your home). The most common source of lead in drinking water is solder used to join copper pipes or faucets made of brass or chrome-plated brass. Older homes (built before 1930) are more likely to have plumbing fixtures containing lead. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.

Want to learn more about Arlington's water? Visit us at www.arlingtontx.gov/water or follow us on Facebook (www.facebook.com/arlingtonwater) or Twitter (@arlingtonwater). You can also find useful information about efficient water use at www. SaveArlingtonWater.com.